

Project No: TM-2606000409P
Report No.: TMWK2606002985KR

FCC ID: 2AWUU68B66201
IC: 26271-68B66201

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RADIO TEST REPORT

FCC 47 CFR PART 15 SUBPART C

INDUSTRY CANADA RSS-247

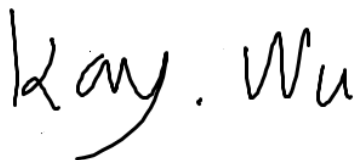
Test Standard	FCC Part 15.247 IC RSS-247 issue 4 and IC RSS-GEN issue 5
Product name	Telephoto Outdoor Remote Deployment Camera
Brand Name	Verkada
Model No.	CR63-512TE-HW, CR63-1TBTE-HW, CR63-2TBTE-HW, CR63-3TBTE-HW, CR63-512TE-HW-G, CR63-1TBTE-HW-G, CR63-2TBTE-HW-G, CR63-3TBTE-HW-G
Test Result	Pass
Statements of Conformity	Determination of compliance is based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

The test Result was tested by Compliance Certification Services Inc. The test data, data evaluation, test procedures, and equipment configurations shown in this report were given in ANSI C63.10-2020 (FCC), ANSI C63.10-2020+Cor. 1-2023+C63.10a-2024+Errata to C63.10a-2024 (IC) and compliance standards.

The test results of this report relate only to the tested sample (EUT) identified in this report.

The test Report of full or partial shall not copy. Without written approval of Compliance Certification Services Inc.(Wugu Laboratory)

Approved by:



Kay Wu
Asst. Supervisor

Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 90 days only.

除非另有說明，此報告結果僅對測試之樣品負責，同時此樣品僅保留90天。本報告未經本公司書面許可，不可部份複製。

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Revision History

Rev.	Issue Date	Revisions	Effect Page	Revised By
00	August 19, 2026	Initial Issue	ALL	Peggy Tsai
01	September 8, 2026	See the following Note Rev.(01)	P. 8, 10, 11., 14, 68, 69	Peggy Tsai
02	September 11, 2026	See the following Note Rev.(02)	P. 14	Peggy Tsai

Rev. (01)

1. Modify instrument calibration in section 1.6.
2. Modify support and EUT accessories equipment and test set up diagram in section 1.7 and 1.8.
3. Modify the worst mode of measurement in section 3.2.
4. Modify TX test data in section 4.6.4.

Rev. (02)

1. Modify the worst mode of measurement in section 3.2.

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1. GENERAL INFORMATION

1.1 EUT INFORMATION

Applicant	FCC: Verkada Inc 405 E. 4th Ave. San Mateo California United States 94401 IC: Verkada, Inc. 405 E. 4th Ave. San Mateo CA 94401 United States Of America (Excluding The States Of Alaska)	
Manufacturer	Verkada, Inc. 406 E. 3rd Ave, San Mateo, CA 94401	
Equipment	Telephoto Outdoor Remote Deployment Camera	
Model No.	CR63-512TE-HW, CR63-1TBTE-HW, CR63-2TBTE-HW, CR63-3TBTE-HW, CR63-512TE-HW-G, CR63-1TBTE-HW-G CR63-2TBTE-HW-G, CR63-3TBTE-HW-G	
Model Discrepancy	Model	Difference
	CR63-512TE-HW	Storage capacity 512GB
	CR63-1TBTE-HW	Storage capacity 1TB
	CR63-2TBTE-HW	Storage capacity 2TB
	CR63-3TBTE-HW	Storage capacity 3TB
	CR63-512TE-HW-G	Storage capacity 512GB marketing purposes only
	CR63-1TBTE-HW-G	Storage capacity 1TB marketing purposes only
	CR63-2TBTE-HW-G	Storage capacity 2TB marketing purposes only
	CR63-3TBTE-HW-G	Storage capacity 3TB marketing purposes only
Trade Name	Verkada	
Received Date	June 30, 2026	
Date of Test	July 15 ~ September 8, 2026	
Power Operation	1. Barrel Jack: 54VDC 2. Passive POE: 48-57VDC 3. DC Solar Input: 16-40VDC	

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PMN	CR63-TE
EUT Serial #	EK4F-3H6R-HDJN
HW Version	2
SW Version	0.1

Remark:

1. For more details, please refer to the User's manual of the EUT.
2. Disclaimer: Antenna information is provided by the applicant, test results of this report are applicable to the sample EUT received.
3. Disclaimer: The variant model numbers / trademarks are assessed as identical in hardware and software to each other, hence all variants are fully covered by the test results in this test report without further verification test.

1.2 EUT CHANNEL INFORMATION

Frequency Range	2402MHz-2480MHz
Modulation Type	GFSK for BLE 125kbps GFSK for BLE 500kbps GFSK for BLE 1 Mbps GFSK for BLE 2 Mbps
Number of channel	40 Channels

Remark:

Refer as ANSI C63.10-2020 (FCC), ANSI C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024 (IC) and RSS-GEN for test channels.

Number of frequencies to be tested		
Frequency range in which device operates	Number of frequencies	Location in frequency range of operation
☐ 1 MHz or less	1	Middle
☐ 1 MHz to 10 MHz	2	1 near top and 1 near bottom
☒ More than 10 MHz	3	1 near top, 1 near middle, and 1 near bottom

1.3 ANTENNA INFORMATION

Antenna Type	☐ PIFA ☐ PCB ☒ Dipole ☐ FPC Antenna
Antenna Brand / Model	SPEED / 0790A2331L-A07
Antenna Gain	2.34 dBi
Antenna Connector	IPEX1

Notes:

1.The antenna(s) of the EUT are permanently attached and there are no provisions for connection to an external antenna. So the EUT complies with the requirements of §15.203 and RSS-GEN 6.8.

1.4 MEASUREMENT UNCERTAINTY

PARAMETER	UNCERTAINTY
AC Powerline Conducted Emission	±2.654dB
Channel Bandwidth	±0.216dB
RF output power (Spectrum)	±0.884dB
RF output power (Power Meter + Power sensor)	±0.442dB
Power Spectral density	±2.105dB
Conducted Bandedge	±2.104dB
Conducted Spurious Emission	±2.104dB
Radiated Emission_9kHz-30MHz	±2.998dB
Radiated Emission_30MHz-200MHz	±3.308dB
Radiated Emission_200MHz-1GHz	±3.506dB
Radiated Emission_1GHz-6GHz	±4.068dB
Radiated Emission_6GHz-18GHz	±4.120dB
Radiated Emission_18GHz-26GHz	±3.411dB
Radiated Emission_26GHz-40GHz	±3.410dB

Remark:

- 1.This uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level using a coverage factor of k=2
2. ISO/IEC 17025 requires that an estimate of the measurement uncertainties associated with the emissions test results be included in the report.

1.5 FACILITIES AND TEST LOCATION

All measurement facilities used to collect the measurement data are located at

☒ No.11, Wugong 6th Rd., Wugu Dist., New Taipei City, Taiwan.

CAB identifier: TW1309

Test site	Test Engineer	Remark
AC Conduction Room	Ben Yang	-
Radiation	Ben Yang	-
RF Conducted	Jerry Chang	-

Remark: The lab has been recognized as the FCC accredited lab. under the KDB 974614 D01 and is listed in the FCC pubic Access Link (PAL) database, FCC Registration No. :444940, the FCC Designation No.:TW1309

1.6 INSTRUMENT CALIBRATION

Conducted_FCC/IC/NCC (All)					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
PXA Signal Analyzer	Keysight	N9030B	MY62291089	2025-09-24	2026-09-23
Power Sensor	Anritsu	MA2411B	1911387	2025-08-21	2026-08-20
Power Sensor	Anritsu	MA2411B	1911386	2026-06-23	2027-06-22
Power Meter	Anritsu	ML2496A	2136002	2026-06-23	2027-06-22
DC Blocks	Marvelous Microwave	MVE6411	MVE-001	2025-08-06	2026-08-05
Software	Radio Test Software Ver. 21				

966A_Radiated					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
Signal Analyzer	Agilent	N9010A	MY52220817	2026-03-13	2027-03-12
Active Loop Antenna	COM-POWER	AL-130	121051	2026-02-04	2027-02-03
Thermo-Hygro Meter	HTC	HTC-1	HTC-D06	2026-05-19	2027-05-18
Bi-Log Antenna	Sunol Sciences	JB3	A030105&532	2026-06-18	2027-06-17
Preamplifier	EMEC	EM330	060609	2026-02-13	2027-02-12
Cable	Huber+Suhner	104PEA	20995+21000+182330	2025-08-06 2026-08-05	2026-08-05 2027-08-04
Horn Antenna	ETC	MCTD 1209	DRH13M02003	2025-12-19	2026-12-18
Preamplifier	HP	8449B	3008A00965	2025-12-17	2026-12-16
Cable	EMCI	EMC101G	1508S0193+230205+250412	2026-01-14	2027-01-13
Attenuator	Mini-Circuits	BW-S9W5	BWS9W5-09-966A-01	2026-02-05	2027-02-04
High Pass Filters	Titan Microwave	T04H30001800070S01	22011402-4	2026-06-01	2027-05-31
Pre-Amplifier	EMC	EMC184045SE	980860	2025-11-19	2026-11-18
Horn Antenna	SCHWARZBECK	BBHA9170	1047	2025-12-09	2026-12-08
Turn Table	CCS	CC-T-1F	N/A	N.C.R	N.C.R
Controller	CCS	CC-C-1F	N/A	N.C.R	N.C.R
Antenna Tower	CCS	CC-A-1F	N/A	N.C.R	N.C.R
Software	e3 V9-210616c				

Remark:

- Each piece of equipment is scheduled for calibration once a year.
- N.C.R. = No Calibration Required.

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AC Mains Conduction					
Name of Equipment	Manufacturer	Model	Serial Number	Calibration Date	Calibration Due
EMI Test Receiver	R&S	ESCI	100064	2026-05-21	2027-05-20
LISN	TESEQ	LN2-16N	22012	2026-02-04	2027-02-03
Cable	Woken	RFC-SMA-100-NMR-084SFL402	MFR-2Y194	2026-03-20	2027-03-19
Software	e3 V9-210616c				

Remark:

1. Each piece of equipment is scheduled for calibration once a year.
2. N.C.R. = No Calibration Required.

1.7 SUPPORT AND EUT ACCESSORIES EQUIPMENT

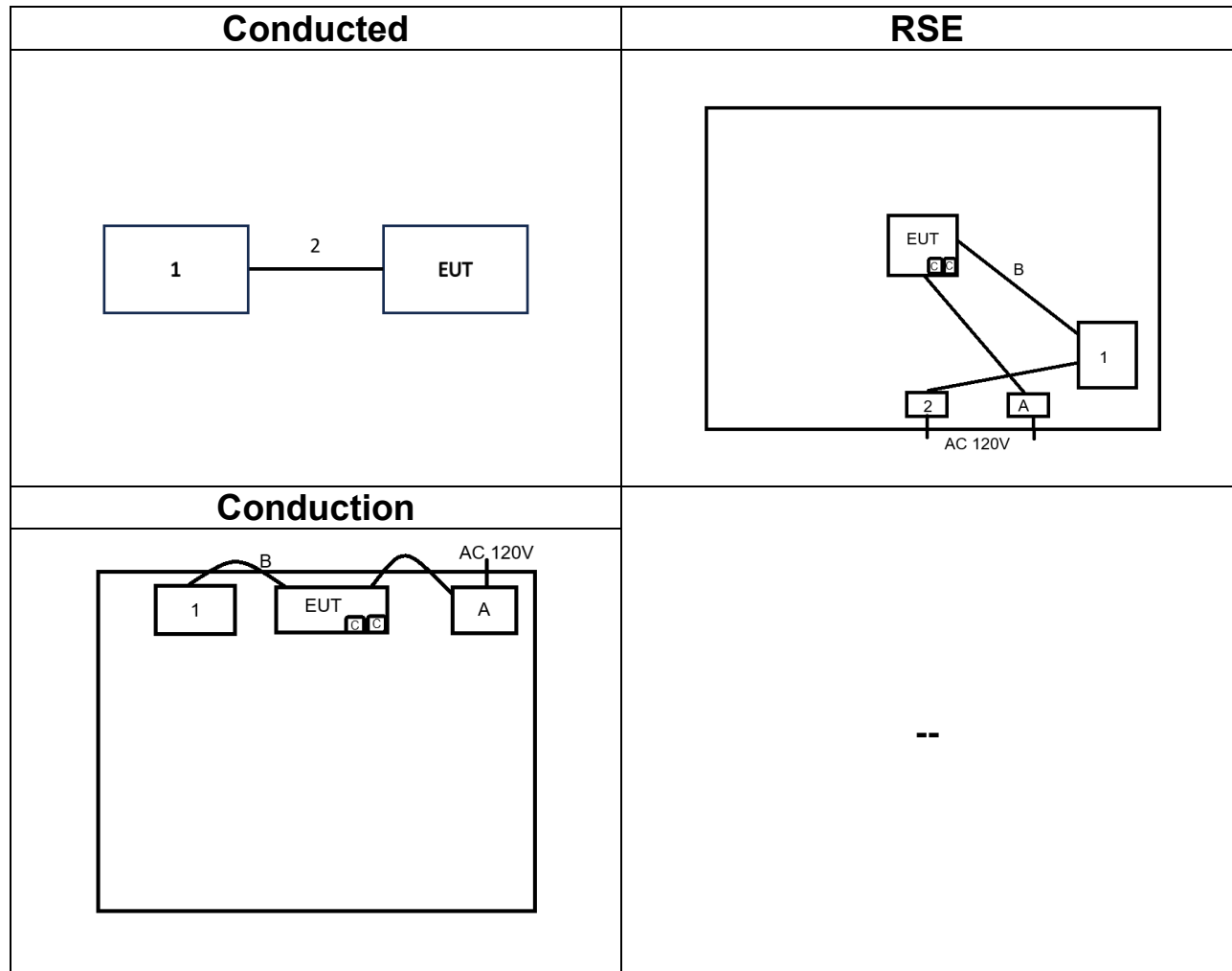
Support Equipment (Conducted)						
No.	Equipment	Brand	Model	Series No.	FCC ID	IC
	N/A					

Support Equipment (Conducted)						
No.	Equipment	Brand	Model	Series No.	FCC ID	IC
1	NB(B)	Lenovo	T470	N/A	N/A	N/A
2	Lan Cable	RASTO REC4	R-PCC004	N/A	N/A	N/A

Support Equipment (RSE)						
No.	Equipment	Brand	Model	Series No.	FCC ID	IC
1	NB(D)	Lenovo	ThinkPad X260	N/A	N/A	N/A
2	Adapter	Lenovo	ADLX45DLC3A	N/A	N/A	N/A
A	Adapter	Verkada	DA-80A54	N/A	N/A	N/A
B	RJ45	N/A	N/A	N/A	N/A	N/A
C	SD Card	Micron	MTSD1T5ANC8MS-1WT	N/A	N/A	N/A

Support Equipment (Conduction)						
No.	Equipment	Brand	Model	Series No.	FCC ID	IC
1	NB(D)	Lenovo	ThinkPad X260	N/A	N/A	N/A
A	Adapter	Verkada	DA-80A54	N/A	N/A	N/A
B	RJ45	N/A	N/A	N/A	N/A	N/A
C	SD Card	Micron	MTSD1T5ANC8MS-1WT	N/A	N/A	N/A

1.8 TEST SET UP DIAGRAM



1.9 TEST PROGRAM

This EUT use TeraTerm and set command to set the frequency, modulation and power to allow continuous transmission of the sample.

TeraTerm v4.73

1.10 TEST METHODOLOGY AND APPLIED STANDARDS

The test methodology, setups and results comply with all requirements in accordance with ANSI C63.10-2020 (FCC), ANSI C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024 (IC), FCC Part 2, FCC Part 15.247, KDB 558074, RSS-247 Issue 4 and RSS-GEN Issue 5.

2. TEST SUMMERY

FCC Standard Section	IC Standard Section	Report Section	Test Item	Result
15.203	-	1.3	Antenna Requirement	Pass
15.207(a)	RSS-GEN 8.8	4.1	AC Conducted Emission	Pass
15.247(a)(2)	RSS-247(6.3.1)(a)	4.2	6 dB Bandwidth	Pass
-	RSS-GEN 6.7	4.2	Occupied Bandwidth (99%)	Pass
15.247(b)(3)	RSS-247(6.3.2)	4.3	Output Power Measurement	Pass
15.247(e)	RSS-247(6.3.1)(b)	4.4	Power Spectral Density	Pass
15.247(d)	RSS-247(6.6)	4.5	Conducted Band Edge	Pass
15.247(d)	RSS-247(6.6)	4.5	Conducted Spurious Emission	Pass
15.247(d) 15.205, 15.209	RSS-GEN 8.9, 8.10	4.6	Radiation Band Edge	Pass
15.247(d) 15.205, 15.209	RSS-GEN 8.9, 8.10	4.6	Radiation Spurious Emission	Pass

3. DESCRIPTION OF TEST MODES

3.1 THE WORST MODE OF OPERATING CONDITION

Operation mode	BLE Mode (125kbps) BLE Mode (500kbps) BLE Mode (1Mbps) BLE Mode (2Mbps)
Test Channel Frequencies	1.Lowest Channel : 2402MHz 2.Middle Channel : 2442MHz 3.Highest Channel : 2480MHz

Remark:

1. EUT pre-scanned data rate of output power for each mode, the worst data rate were recorded in this report.

3.2 THE WORST MODE OF MEASUREMENT

AC Power Line Conduction Emission	
Test Condition	AC Power line conduction emission for line and neutral
Power supply Mode	Mode 1: EUT power by Adapter Mode 2: EUT power by POE
Worst Mode	☒ Mode 1 ☐ Mode 2 ☐ Mode 3

Radiated Emission Measurement Above 1G	
Test Condition	Radiated Emission Above 1G
Power supply Mode	Mode 1: EUT power by Adapter(Model: CR63-3TBTE-HW)
Worst Mode	☒ Mode 1 ☐ Mode 2 ☐ Mode 3 ☐ Mode 4
Worst Position	☐ Placed in fixed position. ☒ Placed in fixed position at X-Plane (E2-Plane) ☐ Placed in fixed position at Y-Plane (E1-Plane) ☐ Placed in fixed position at Z-Plane (H-Plane)

Radiated Emission Measurement Below 1G	
Test Condition	Radiated Emission Below 1G
Power supply Mode	Mode 1: EUT power by Adapter Mode 2: EUT power by POE Mode 3: EUT power by Battery Mode 4: EUT power by Adapter(Model: CR63-3TBTE-HW) Mode 5: EUT power by Adapter(Model: CR63-512TE-HW)
Worst Mode	☐ Mode 1 ☐ Mode 2 ☐ Mode 3 ☒ Mode 4 ☐ Mode 5

Remark:

1. The worst mode was record in this test report.
2. AC power line conducted emission were performed the EUT transmit at the highest output power channel as worse case.
3. EUT pre-scanned in three axis ,X,Y, Z and two polarity, for radiated measurement. The worst case(X-Plane) were recorded in this report.

3.3 EUT DUTY CYCLE

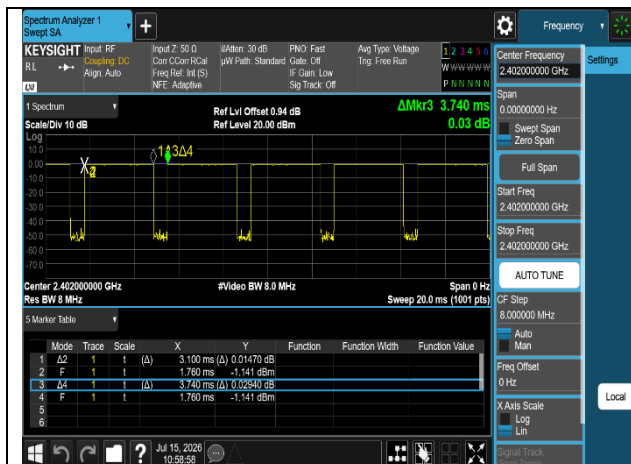
Temperature: 23.7 ~ 26.3°C

Test date: July 15 ~ August 4, 2026

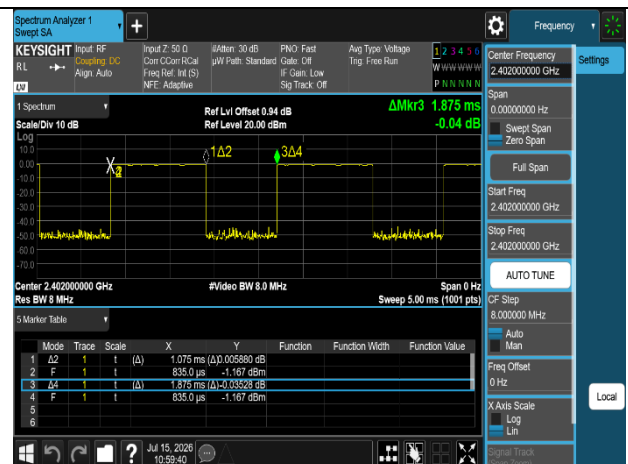
Humidity: 52 ~ 58% RH

Tested by: Jerry Chang

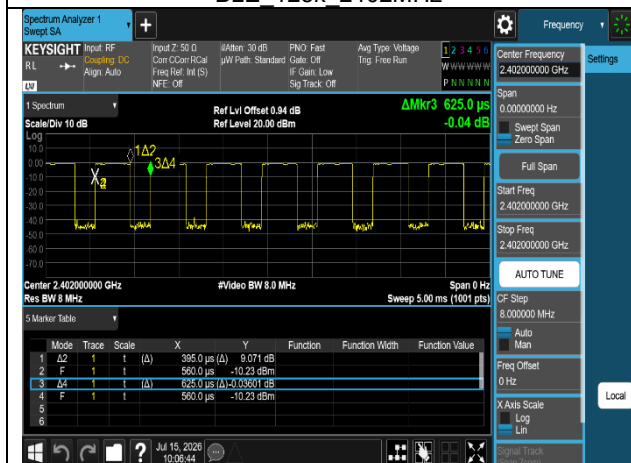
Mode	Duty Cycle (%) = Ton / (Ton+Toff)	Duty Factor (dB) =10*log (1/Duty Cycle)	1/T (kHz)	VBW setting (kHz)
BLE 125k	82.89	0.81	0.32	1.00
BLE 500k	57.33	2.42	0.93	1.00
BLE 1M	63.20	1.99	2.53	3.00
BLE 2M	32.80	4.84	4.88	5.00



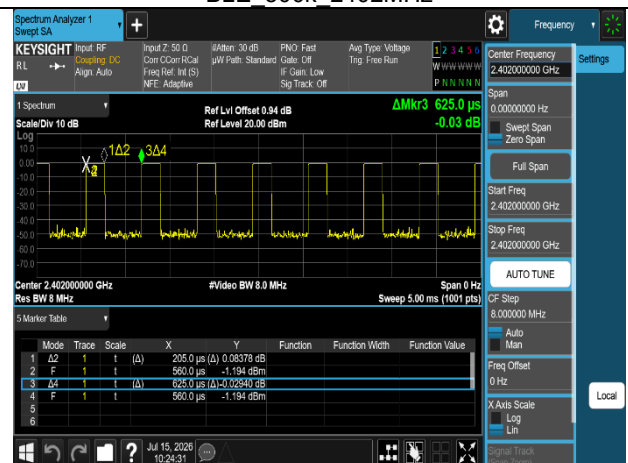
BLE 125k 2402MHz



BLE 500k 2402MHz



BLE 1M 2402MHz



BLE 2M 2402MHz

4. TEST RESULT

4.1 AC POWER LINE CONDUCTED EMISSION

4.1.1 Test Limit

According to §15.207(a) and RSS-GEN section 8.8,

Frequency Range (MHz)	Limits(dBμV)	
	Quasi-peak	Average
0.15 to 0.50	66 to 56*	56 to 46*
0.50 to 5	56	46
5 to 30	60	50

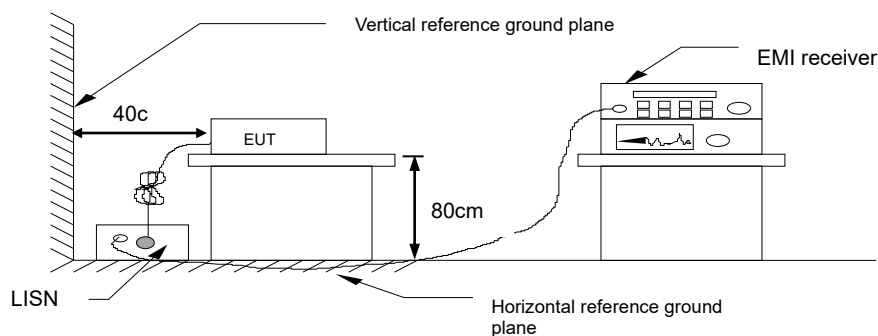
* Decreases with the logarithm of the frequency.

4.1.2 Test Procedure

Test method Refer as ANSI C63.10-2020 (FCC), ANSI C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024 (IC),

1. The EUT was placed on a non-conducted table, which is 0.8m above horizontal ground plane and 0.4m above vertical ground plane.
2. EUT connected to the line impedance stabilization network (LISN)
3. Receiver set RBW of 9kHz and Detector Peak, and note as quasi-peak and average.
4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
5. Recorded Line for Neutral and Line.

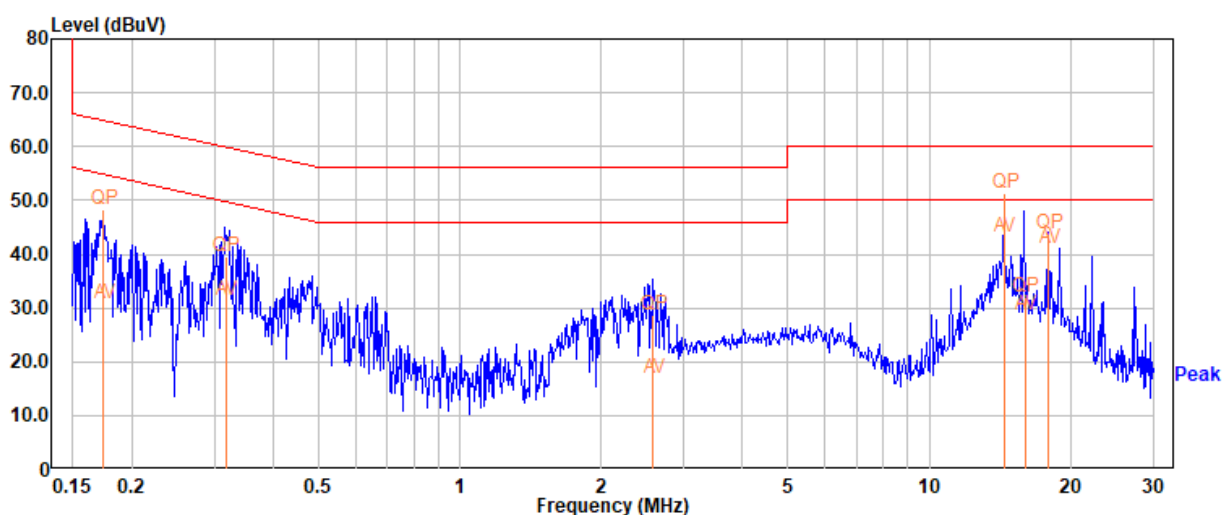
4.1.3 Test Setup



4.1.4 Test Result

Project No : TM-2606000409P
Operation Band : BLE
Test Chamber : Conduction
Probe : Line
Note :

Test Date : 2026-07-16
Temp./Humi. : 25°C / 65%
Engineer : Ben.Yang
Test Voltage : AC 120V/60Hz



Trace:						
Freq	Read Level	Factor	Actual FS	Limit	Margin	Detector Mode
-----	-----	-----	-----	-----	-----	-----
MHz	dBuV	dB	dBuV	dBuV	dB	PK/QP/AV
0.175	48.16	0.10	48.26	64.73	-16.47	QP
0.175	30.78	0.10	30.88	54.73	-23.85	Average
0.317	39.60	0.08	39.68	59.77	-20.09	QP
0.317	31.19	0.08	31.27	49.77	-18.50	Average
2.587	28.51	0.13	28.64	56.00	-27.36	QP
2.587	16.78	0.13	16.91	46.00	-29.09	Average
14.490	51.14	0.30	51.44	60.00	-8.56	QP
14.490	42.81	0.30	43.11	50.00	-6.89	Average
16.008	31.80	0.31	32.11	60.00	-27.89	QP
16.008	28.25	0.31	28.56	50.00	-21.44	Average
18.009	43.44	0.34	43.78	60.00	-16.22	QP
18.009	40.73	0.34	41.07	50.00	-8.93	Average

Note: 1. Actual FS= Spectrum Read Level + Factor

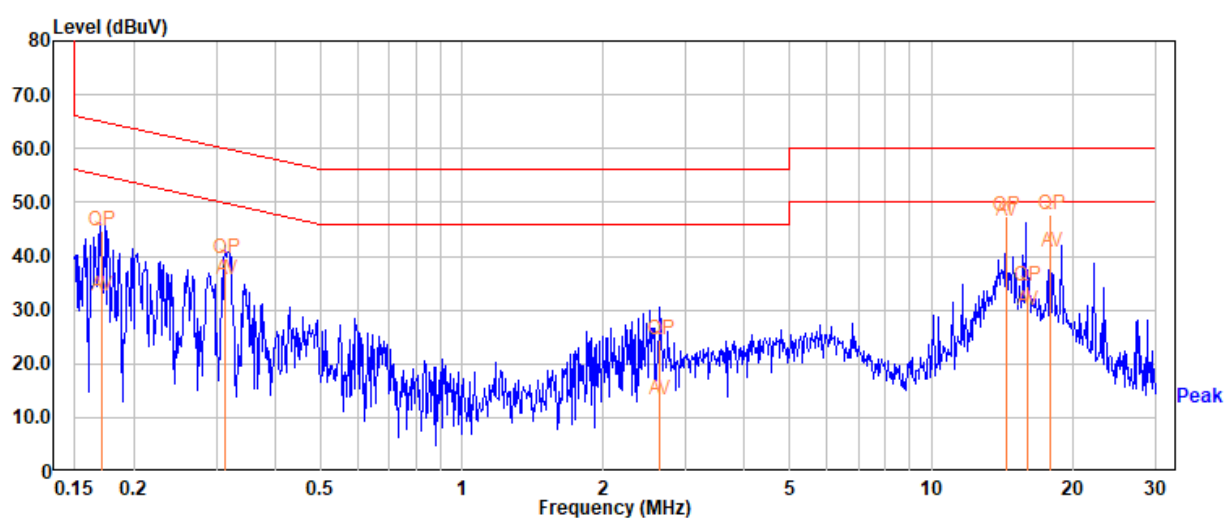
Note: 2. Margin= Actual FS - Limit

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Project No : TM-2606000409P
Operation Band : BLE
Test Chamber : Conduction
Probe : Neutral
Note :

Test Date : 2026-07-16
Temp./Humi. : 25°C / 65%
Engineer : Ben.Yang
Test Voltage : AC 120V/60Hz



Trace:						
Freq	Read Level	Factor	Actual FS	Limit	Margin	Detector Mode
-----	-----	-----	-----	-----	-----	-----
MHz	dBuV	dB	dBuV	dBuV	dB	PK/QP/AV
0.171	44.51	0.12	44.63	64.93	-20.30	QP
0.171	32.44	0.12	32.56	54.93	-22.37	Average
0.314	39.33	0.10	39.43	59.85	-20.42	QP
0.314	35.48	0.10	35.58	49.85	-14.27	Average
2.642	24.42	0.15	24.57	56.00	-31.43	QP
2.642	13.23	0.15	13.38	46.00	-32.62	Average
14.456	47.21	0.30	47.51	60.00	-12.49	QP
14.456	46.21	0.30	46.51	50.00	-3.49	Average
16.006	33.95	0.31	34.26	60.00	-25.74	QP
16.006	29.45	0.31	29.76	50.00	-20.24	Average
18.008	47.52	0.33	47.85	60.00	-12.15	QP
18.008	40.47	0.33	40.80	50.00	-9.20	Average

Note: 1. Actual FS= Spectrum Read Level + Factor

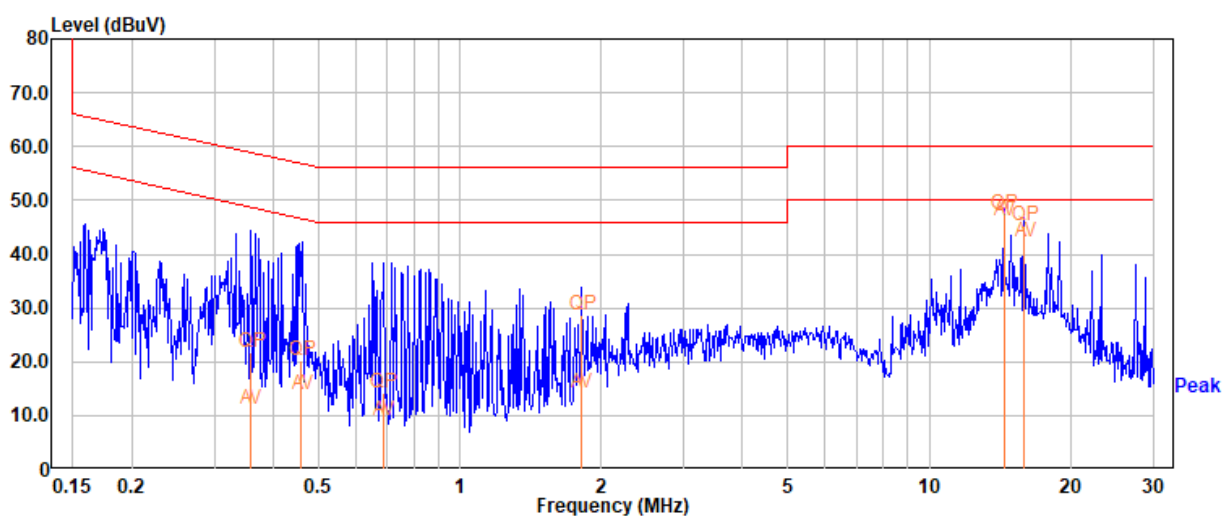
Note: 2. Margin= Actual FS - Limit

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Project No : TM-2606000409P
Operation Band : BLE
Test Chamber : Conduction
Probe : Line
Note :

Test Date : 2026-07-16
Temp./Humi. : 25°C / 65%
Engineer : Ben.Yang
Test Voltage : AC 230V/60Hz



Trace:						
Freq	Read Level	Factor	Actual FS	Limit	Margin	Detector Mode
-----	-----	-----	-----	-----	-----	-----
MHz	dBuV	dB	dBuV	dBuV	dB	PK/QP/AV
0.358	21.61	0.08	21.69	58.76	-37.07	QP
0.358	11.20	0.08	11.28	48.76	-37.48	Average
0.461	20.19	0.08	20.27	56.68	-36.41	QP
0.461	13.68	0.08	13.76	46.68	-32.92	Average
0.686	14.08	0.08	14.16	56.00	-41.84	QP
0.686	9.11	0.08	9.19	46.00	-36.81	Average
1.818	28.60	0.12	28.72	56.00	-27.28	QP
1.818	14.07	0.12	14.19	46.00	-31.81	Average
14.460	47.02	0.30	47.32	60.00	-12.68	QP
14.460	45.85	0.30	46.15	50.00	-3.85	Average
15.982	45.05	0.31	45.36	60.00	-14.64	QP
15.982	41.95	0.31	42.26	50.00	-7.74	Average

Note: 1. Actual FS= Spectrum Read Level + Factor

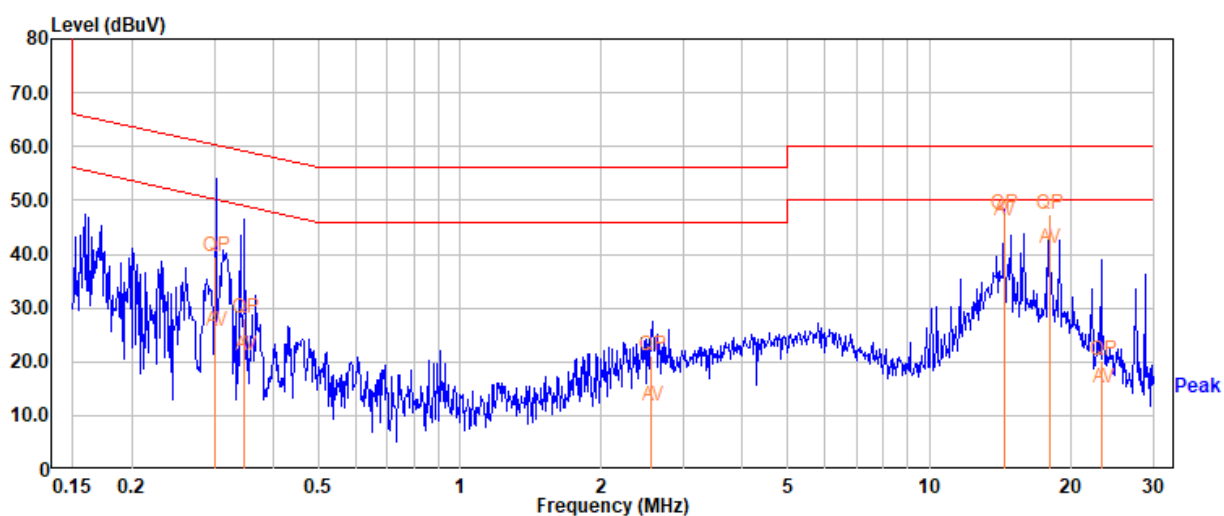
Note: 2. Margin= Actual FS - Limit

Project No: TM-2606000409P
Report No.: TMWK2606002985KR

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Rev.: 02

Project No : TM-2606000409P
Operation Band : BLE
Test Chamber : Conduction
Probe : Neutral
Note :

Test Date : 2026-07-16
Temp./Humi. : 25°C / 65%
Engineer : Ben.Yang
Test Voltage : AC 230V/60Hz



Trace:						
Freq	Read Level	Factor	Actual FS	Limit	Margin	Detector Mode
-----	-----	-----	-----	-----	-----	-----
MHz	dBuV	dB	dBuV	dBuV	dB	PK/QP/AV
0.302	39.45	0.10	39.55	60.18	-20.63	QP
0.302	25.53	0.10	25.63	50.18	-24.55	Average
0.348	28.09	0.10	28.19	59.01	-30.82	QP
0.348	21.17	0.10	21.27	49.01	-27.74	Average
2.562	20.91	0.15	21.06	56.00	-34.94	QP
2.562	11.69	0.15	11.84	46.00	-34.16	Average
14.459	47.11	0.30	47.41	60.00	-12.59	QP
14.459	45.97	0.30	46.27	50.00	-3.73	Average
18.011	47.12	0.33	47.45	60.00	-12.55	QP
18.011	40.77	0.33	41.10	50.00	-8.90	Average
23.382	19.86	0.39	20.25	60.00	-39.75	QP
23.382	14.69	0.39	15.08	50.00	-34.92	Average

Note: 1. Actual FS= Spectrum Read Level + Factor

Note: 2. Margin= Actual FS - Limit

4.2 6dB BANDWIDTH AND OCCUPIED BANDWIDTH(99%)

4.2.1 Test Limit

According to §15.247(a)(2) and RSS-247 section 6.3.1 (a),

6 dB Bandwidth :

Limit	Shall be at least 500kHz
-------	--------------------------

Occupied Bandwidth(99%) : For reporting purposes only.

4.2.2 Test Procedure

FCC:

Test method Refer as KDB 558074 D01 and ANSI C63.10-2020,

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 100kHz, VBW = 300kHz and Detector = Peak, to measurement 6 dB Bandwidth.
4. SA set RBW = 1% ~ 5% OBW, VBW = three times the RBW and Detector = Peak, to measurement 99% Bandwidth
5. Measure and record the result of 6 dB Bandwidth and 99% Bandwidth. In the test report.

IC:

Test method Refer as KDB 558074 D01 and ANSI C63.10-2020 + Cor. 1-2023 + C63.10a-2024 + Errata to C63.10a-2024,

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 1% ~ 5% OBW, VBW = three times the RBW and Detector = Peak, to measurement 99% Bandwidth and 6 dB Bandwidth.
4. Measure and record the result of 6 dB Bandwidth and 99% Bandwidth. In the test report.

4.2.3 Test Setup

Refer to section 1.8.

4.2.4 Test Result

Temperature: 23.7 ~ 26.3°C

Test date: July 15 ~ August 4, 2026

Humidity: 52 ~ 58% RH

Tested by: Jerry Chang

6dB BANDWIDTH

BLE 125k mode(Payload S=8)

Frequency (MHz)	6dB BW (MHz)	Required BW (MHz)	Result
2402	0.6069	≥ 0.5	PASS
2440	0.6062	≥ 0.5	PASS
2480	0.6034	≥ 0.5	PASS

BLE 500k mode(Payload S=2)

Frequency (MHz)	6dB BW (MHz)	Required BW (MHz)	Result
2402	0.645	≥ 0.5	PASS
2440	0.6441	≥ 0.5	PASS
2480	0.6456	≥ 0.5	PASS

BLE 1M mode

Frequency (MHz)	6dB BW (MHz)	Required BW (MHz)	Result
2402	0.6744	≥ 0.5	PASS
2440	0.6818	≥ 0.5	PASS
2480	0.6718	≥ 0.5	PASS

BLE 2M mode

Frequency (MHz)	6dB BW (MHz)	Required BW (MHz)	Result
2402	0.5696	≥ 0.5	PASS
2440	0.5803	≥ 0.5	PASS
2480	0.586	≥ 0.5	PASS

BANDWIDTH 99%

BLE 125k mode(Payload S=8)

Frequency (MHz)	99%Bandwidth (MHz)
2402	1.0707
2440	1.0744
2480	1.0649

BLE 500k mode(Payload S=2)

Frequency (MHz)	99%Bandwidth (MHz)
2402	1.0539
2440	1.0537
2480	1.045

BLE 1M mode

Frequency (MHz)	99%Bandwidth (MHz)
2402	1.0567
2440	1.0576
2480	1.0546

BLE 2M mode

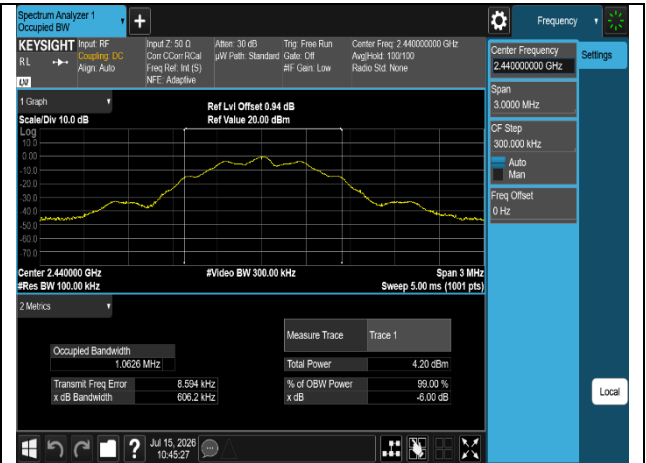
Frequency (MHz)	99%Bandwidth (MHz)
2402	2.1158
2440	2.1196
2480	2.1164

Test Data

6dB BANDWIDTH



OBW 6dB BLE 125k 2402MHz



OBW 6dB BLE 125k 2440MHz



OBW 6dB BLE 125k 2480MHz



OBW 6dB BLE 500k 2402MHz



OBW 6dB BLE 500k 2440MHz



OBW 6dB BLE 500k 2480MHz



OBW 6dB BLE 1M 2402MHz



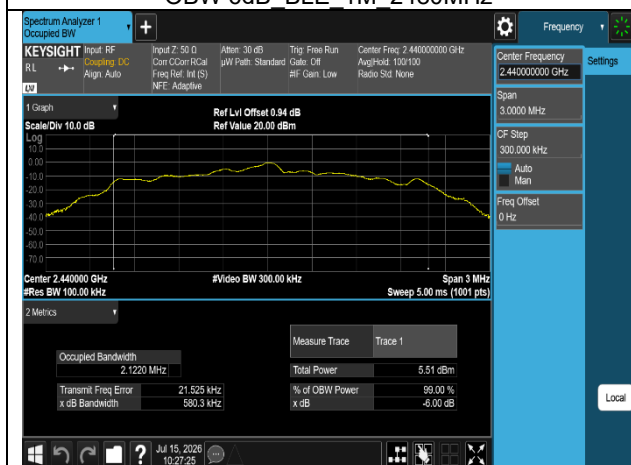
OBW 6dB BLE 1M 2440MHz



OBW 6dB BLE 1M 2480MHz



OBW 6dB BLE 2M 2402MHz



OBW 6dB BLE 2M 2440MHz

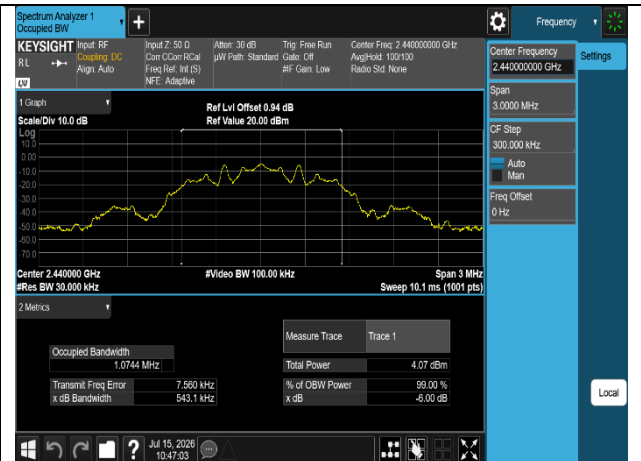


OBW 6dB BLE 2M 2480MHz

BANDWIDTH 99%



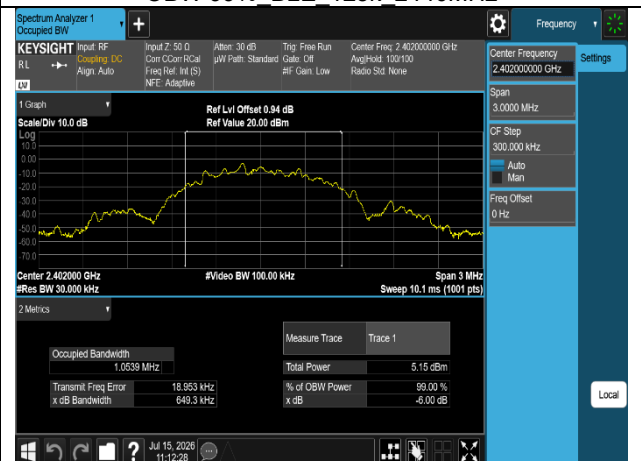
OBW 99% BLE 125k 2402MHz



OBW 99% BLE 125k 2440MHz



OBW 99% BLE 125k 2480MHz



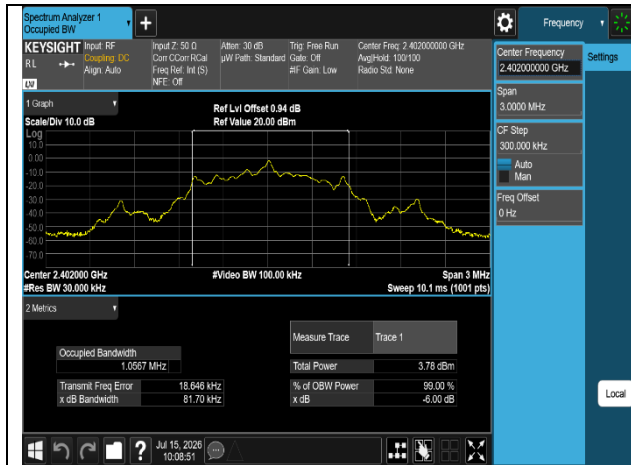
OBW 99% BLE 500k 2402MHz



OBW 99% BLE 500k 2440MHz



OBW 99% BLE 500k 2480MHz



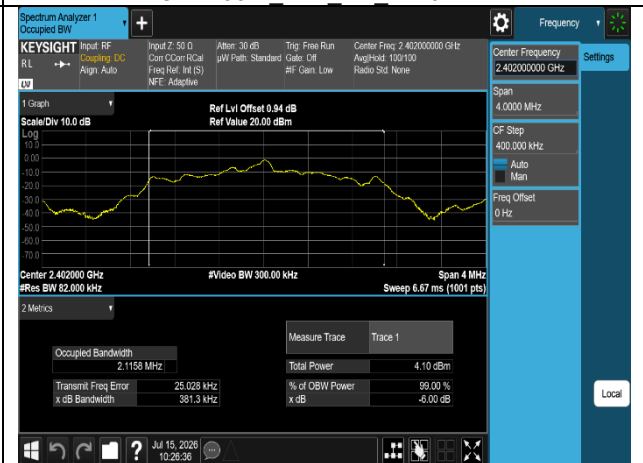
OBW 99% BLE 1M 2402MHz



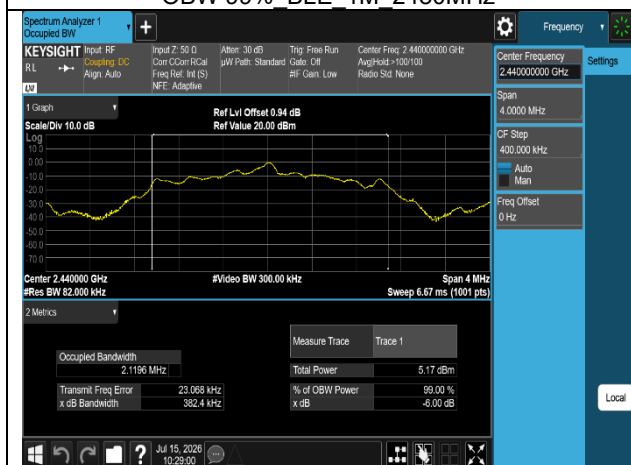
OBW 99% BLE 1M 2440MHz



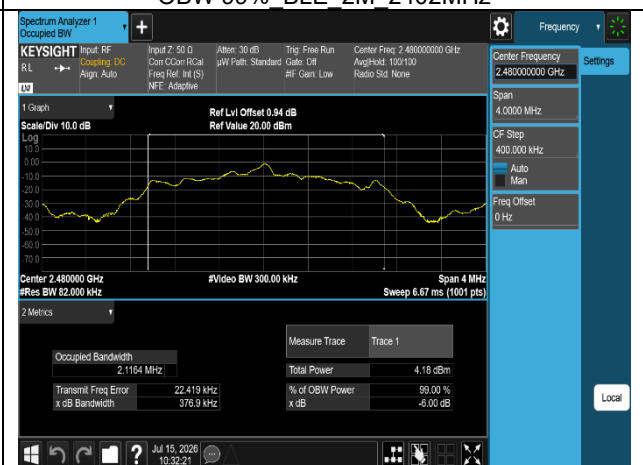
OBW 99% BLE 1M 2480MHz



OBW 99% BLE 2M 2402MHz



OBW 99% BLE 2M 2440MHz



OBW 99% BLE 2M 2480MHz

4.3 OUTPUT POWER MEASUREMENT

4.3.1 Test Limit

According to §15.247(b)(3) and RSS-247 section 6.3.2,

Peak output power :

FCC:

For systems using digital modulation in the 902-928 MHz, 2400-2483.5 MHz, and 5725-5850 MHz bands: 1 Watt.

IC:

For DTS operating in the band 2400-2483.5 MHz, the maximum peak conducted output power shall not exceed 1W, and the e.i.r.p. shall not exceed 4 W, except as provided in section 6.5 a) and b).

As an alternative to a peak power measurement, compliance can be based on a measurement of the maximum conducted output power.

Limit	☒ Antenna not exceed 6 dBi : 30dBm ☐ Antenna with DG greater than 6 dBi [Limit = 30 – (DG – 6)] ☐ Point-to-point operation
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Average output power : For reporting purposes only.

4.3.2 Test Procedure

Test method Refer as KDB 558074 D01

1. The EUT RF output connected to the power meter by RF cable.
2. Setting maximum power transmit of EUT.
3. The path loss was compensated to the results for each measurement.
4. Measure and record the result of Peak output power and Average output power. in the test report.

4.3.3 Test Setup

Refer to section 1.8.

4.3.4 Test Result

Temperature: 23.7 ~ 26.3°C
Humidity: 52 ~ 58% RH

Test date: July 15 ~ August 4, 2026
Tested by: Jerry Chang

Peak & Average output power :

BLE 125k mode(Payload S=8):

CH	Frequency (MHz)	Power Setting	Peak Output Power (dBm)	Required Limit (dBm)
0	2402	default	-1.06	30
19	2440	default	-0.15	30
39	2480	default	-1.17	30
CH	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Required Limit (dBm)
0	2402	default	-1.19	30
19	2440	default	-0.25	30
39	2480	default	-1.29	30

***Note:**

1.Measured by power meter, path loss 0.94 dB + Duty cycle factor has been offseted to the power meter for Avg. power and path loss has been offseted for Peak power measurement.

BLE 500k mode(Payload S=2):

CH	Frequency (MHz)	Power Setting	Peak Output Power (dBm)	Required Limit (dBm)
0	2402	default	-1.07	30
19	2440	default	-0.15	30
39	2480	default	-1.15	30
CH	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Required Limit (dBm)
0	2402	default	-1.17	30
19	2440	default	-0.21	30
39	2480	default	-1.24	30

***Note:**

1.Measured by power meter, path loss 0.94 dB + Duty cycle factor has been offseted to the power meter for Avg. power and path loss has been offseted for Peak power measurement.

BLE 1M mode:

CH	Frequency (MHz)	Power Setting	Peak Output Power (dBm)	Required Limit (dBm)
0	2402	default	-1.05	30
19	2440	default	-0.14	30
39	2480	default	-1.15	30
CH	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Required Limit (dBm)
0	2402	default	-1.19	30
19	2440	default	-0.24	30
39	2480	default	-1.28	30

***Note:**

1. Measured by power meter, path loss 0.94 dB + Duty cycle factor has been offseted to the power meter for Avg. power and path loss has been offseted for Peak power measurement.

BLE 2M mode:

CH	Frequency (MHz)	Power Setting	Peak Output Power (dBm)	Required Limit (dBm)
0	2402	default	-1.03	30
19	2440	default	-0.14	30
39	2480	default	-1.14	30
CH	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Required Limit (dBm)
0	2402	default	-1.10	30
19	2440	default	-0.17	30
39	2480	default	-1.19	30

***Note:**

1. Measured by power meter, path loss 0.94 dB + Duty cycle factor has been offseted to the power meter for Avg. power and path loss has been offseted for Peak power measurement.

EIRP Power:

EIRP BLE 125k mode(Payload S=8)

CH	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit
0	2402	default	-1.19	2.34	1.15	4W= 36 dBm
19	2440	default	-0.25	2.34	2.09	4W= 36 dBm
39	2480	default	-1.29	2.34	1.05	4W= 36 dBm

* **Note:** EIRP = Average Power + Gain

EIRP BLE 500k mode(Payload S=2)

CH	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit
0	2402	default	-1.17	2.34	1.17	4W= 36 dBm
19	2440	default	-0.21	2.34	2.13	4W= 36 dBm
39	2480	default	-1.24	2.34	1.10	4W= 36 dBm

* **Note:** EIRP = Average Power + Gain

EIRP BLE 1M mode

CH	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit
0	2402	default	-1.19	2.34	1.15	4W= 36 dBm
19	2440	default	-0.24	2.34	2.10	4W= 36 dBm
39	2480	default	-1.28	2.34	1.06	4W= 36 dBm

* **Note:** EIRP = Average Power + Gain

EIRP BLE 2M mode

CH	Frequency (MHz)	Power Setting	Avg. Output Power (dBm)	Antenna Gain (dBi)	EIRP (dBm)	Limit
0	2402	default	-1.10	2.34	1.24	4W= 36 dBm
19	2440	default	-0.17	2.34	2.17	4W= 36 dBm
39	2480	default	-1.19	2.34	1.15	4W= 36 dBm

* **Note:** EIRP = Average Power + Gain

4.4 POWER SPECTRAL DENSITY

4.4.1 Test Limit

According to §15.247(e) and RSS-247 section 6.3.1 (b),

For digitally modulated systems, the power spectral density conducted from the intentional radiator to the antenna shall not be greater than 8 dBm in any 3 kHz band during any time interval of continuous transmission.

Limit	☒ Antenna not exceed 6 dBi : 8dBm ☐ Antenna with DG greater than 6 dBi [Limit = 8 – (DG – 6)] ☐ Point-to-point operation :
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4.4.2 Test Procedure

Test method Refer as KDB 558074 D01

1. The EUT RF output connected to the spectrum analyzer by RF cable.
2. Setting maximum power transmit of EUT
3. SA set RBW = 3kHz, VBW = 10kHz, Span = 1.5 times DTS Bandwidth (6 dB BW), Detector = Peak, Sweep Time = Auto and Trace = Max hold.
4. The path loss was compensated to the results for each measurement by SA.
5. Mark the maximum level.
6. Measure and record the result of power spectral density. in the test report.

4.4.3 Test Setup

Refer to section 1.8.

4.4.4 Test Result

Temperature: 23.7 ~ 26.3°C

Test date: July 15 ~ August 4, 2026

Humidity: 52 ~ 58% RH

Tested by: Jerry Chang

BLE 125k mode(Payload S=8)

Frequency (MHz)	RF Power Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2402	-7.29	8	PASS
2440	-6.21	8	PASS
2480	-7.33	8	PASS

***Note:**

1.path loss as 0.94 dB that offsets in the spectrum

BLE 500k mode(Payload S=2)

Frequency (MHz)	RF Power Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2402	-2.90	8	PASS
2440	-1.33	8	PASS
2480	-2.71	8	PASS

***Note:**

1.path loss as 0.94 dB that offsets in the spectrum

BLE 1M mode

Frequency (MHz)	RF Power Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2402	-2.52	8	PASS
2440	-1.50	8	PASS
2480	-2.41	8	PASS

***Note:**

1.path loss as 0.94 dB that offsets in the spectrum

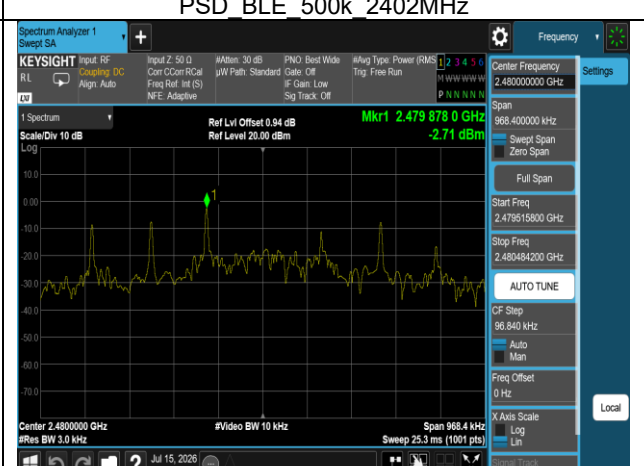
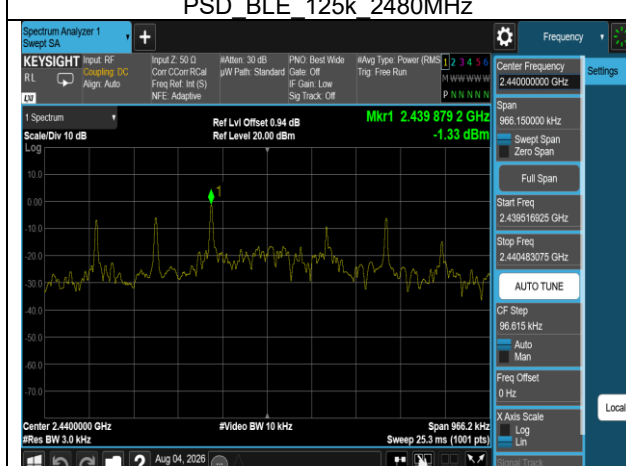
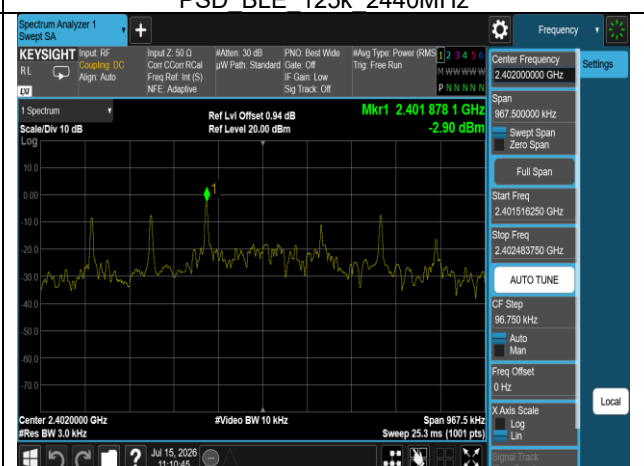
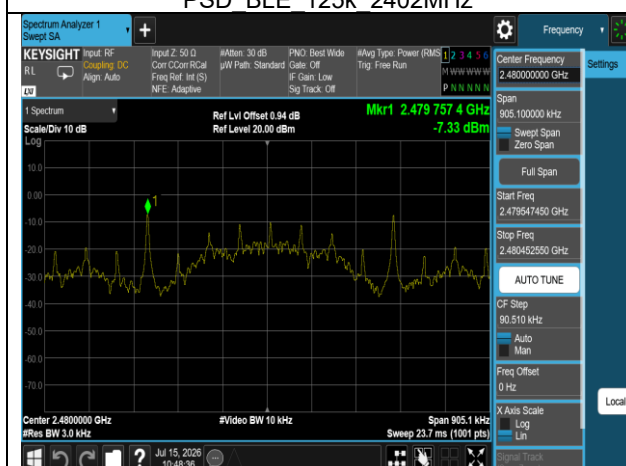
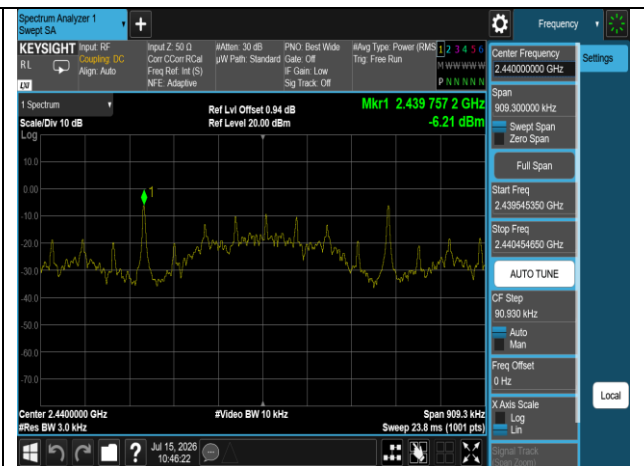
BLE 2M mode

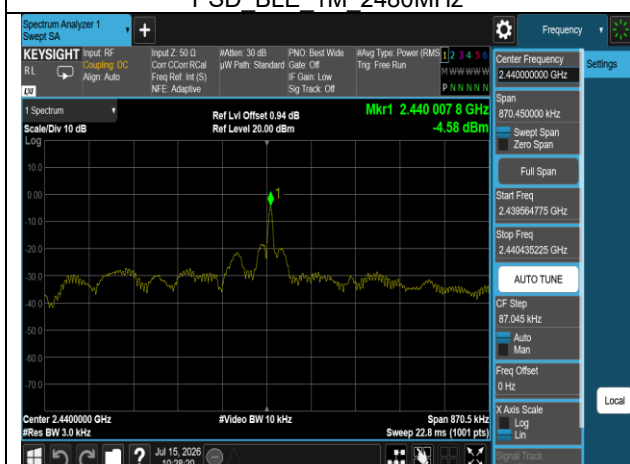
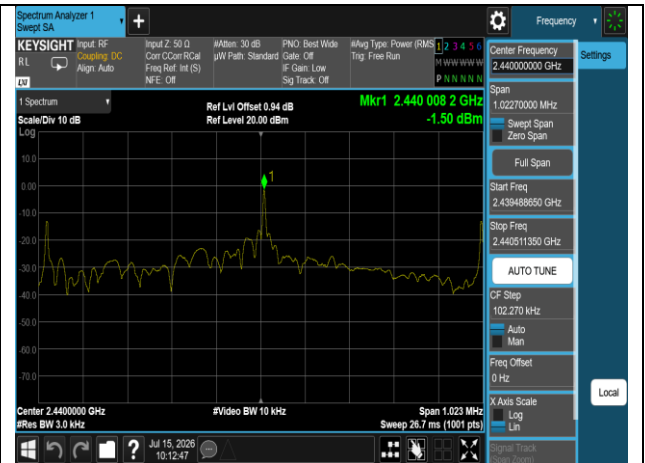
Frequency (MHz)	RF Power Density (dBm/3kHz)	Maximum Limit (dBm/3kHz)	Result
2402	-5.59	8	PASS
2440	-4.58	8	PASS
2480	-5.50	8	PASS

***Note:**

1.path loss as 0.94 dB that offsets in the spectrum

Test Data





4.5 CONDUCTED BAND EDGE AND SPURIOUS EMISSION

4.5.1 Test Limit

According to §15.247(d) and RSS-247 section 6.6,

FCC: In any 100 kHz bandwidth outside the authorized frequency band, Non-restricted bands shall be attenuated at least 20 dB/30 dB relative to the maximum PSD level in 100 kHz by RF conducted or a radiated measurement which fall in the restricted bands, as defined in §15.205(a), must also comply with the radiated emission limits specified in §15.209(a).

IC: In any 100 kHz bandwidth outside the frequency band in which the spread spectrum device, digitally modulated device, or hybrid system is operating, the RF power that is produced shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power – based on either an RF conducted or a radiated measurement – provided that the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of root-mean-square averaging over a time interval, as permitted under section 6.3.2, the attenuation required shall be 30 dB instead of 20 dB. Attenuation below the general field strength limits specified in RSS-Gen is not required.

4.5.2 Test Procedure

Test method Refer as KDB 558074 D01

1. EUT RF output port connected to the SA by RF cable, and the path loss was compensated to result.
2. SA setting, RBW=100kHz, VBW=300kHz, Detector=Peak, Trace mode = max hold, SWT = Auto.
3. In any 100 kHz bandwidth outside the authorized frequency band, shall be attenuated at least 20 dB relative to the maximum in-band peak PSD level in 100 kHz when conducted power procedure is used. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, the attenuation required under this paragraph shall be 30 dB instead of 20 dB.

4.5.3 Test Setup

Refer to section 1.8.

4.5.4 Test Result

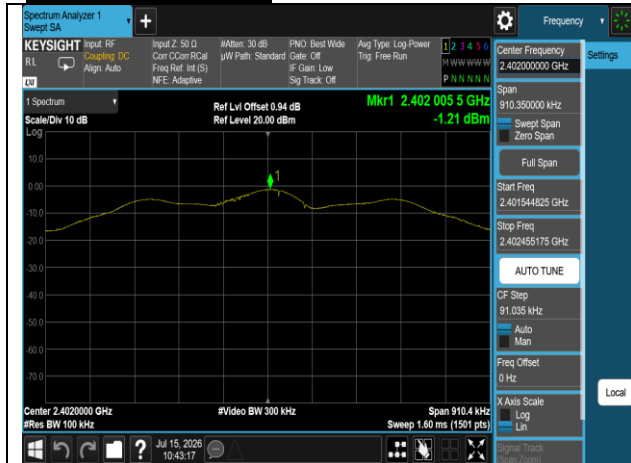
Temperature: 23.7 ~ 26.3°C

Test date: July 15 ~ August 4, 2026

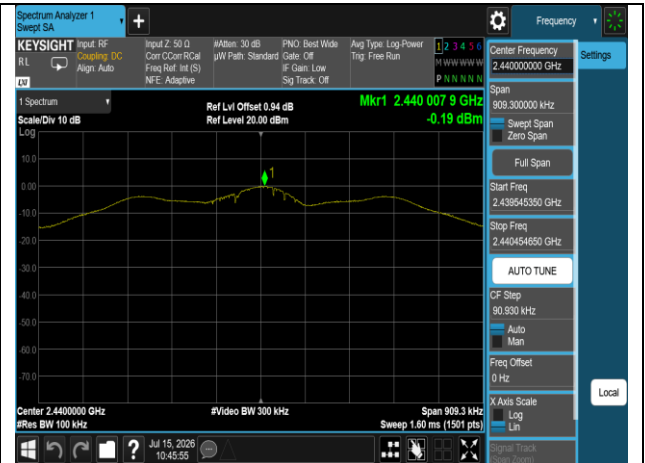
Humidity: 52 ~ 58% RH

Tested by: Jerry Chang

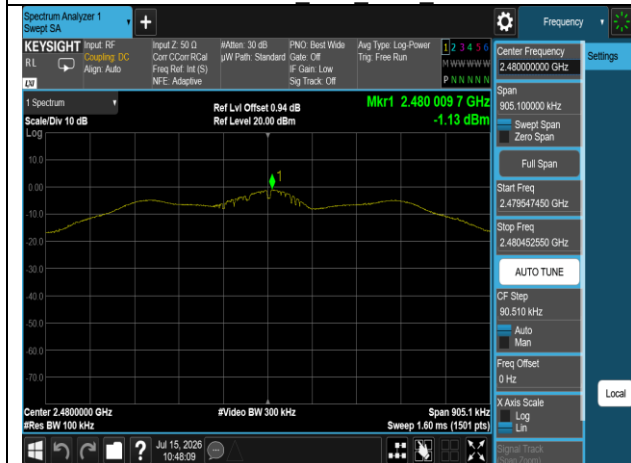
Test Data Reference Level



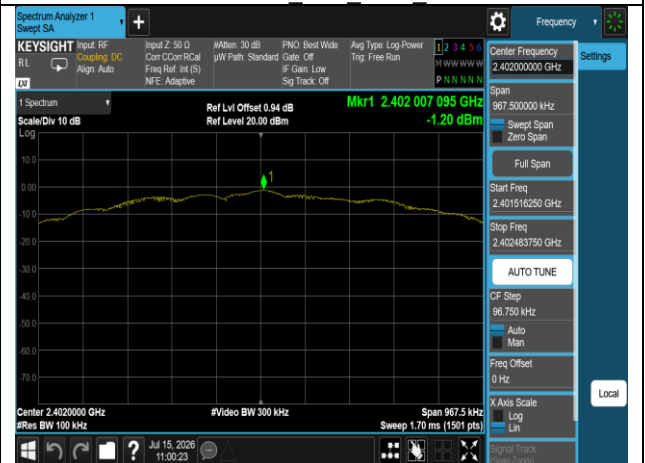
Reference Level BLE 125k 2402MHz



Reference Level BLE 125k 2440MHz



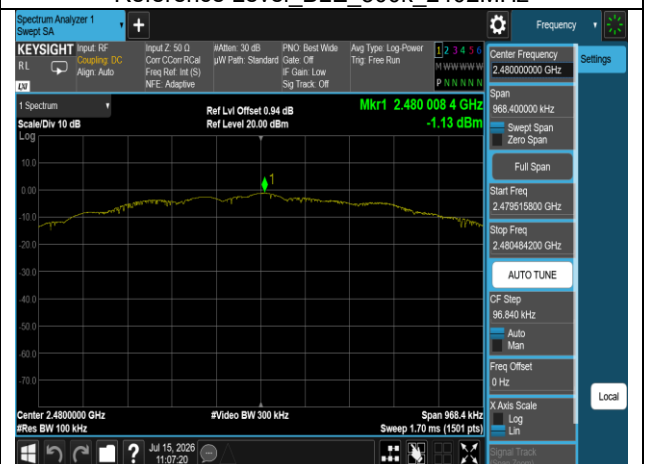
Reference Level BLE 125k 2480MHz



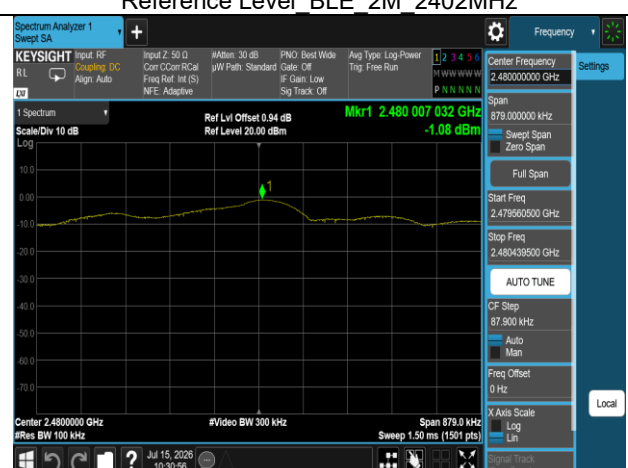
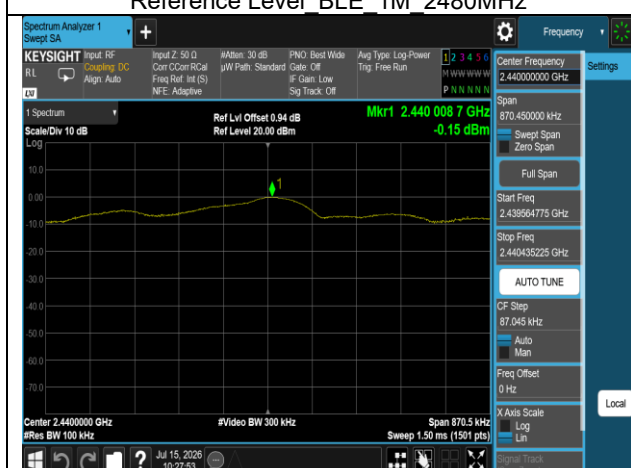
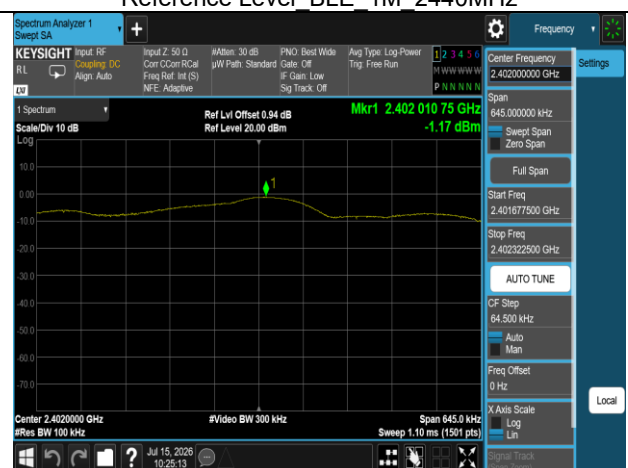
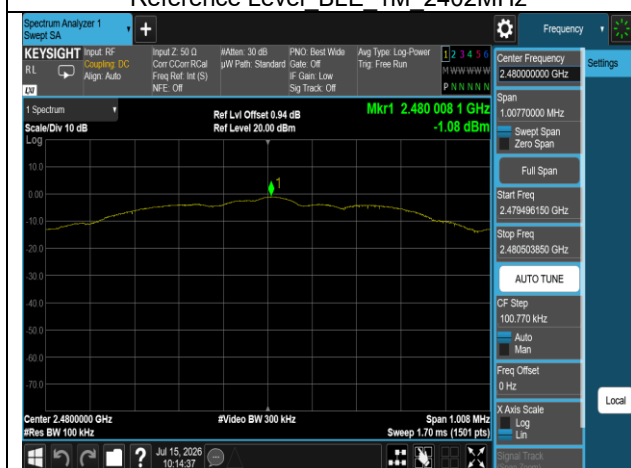
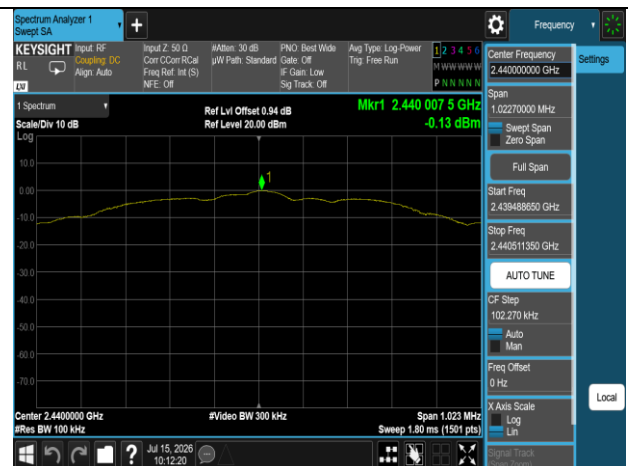
Reference Level BLE 500k 2402MHz



Reference Level BLE 500k 2440MHz



Reference Level BLE 500k 2480MHz



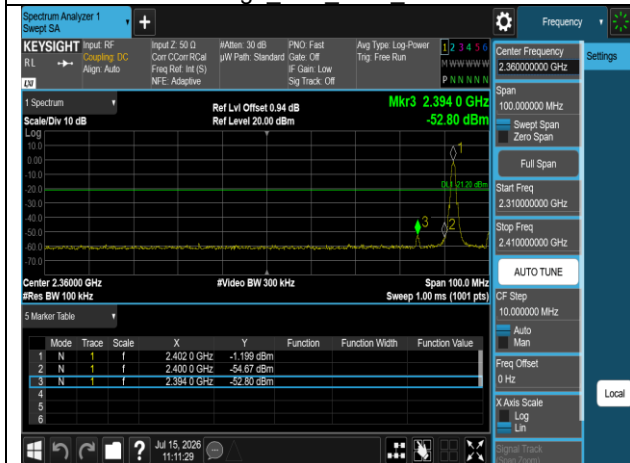
Band Edge



Band Edge BLE 125k 2402MHz



Band Edge BLE 125k 2480MHz



Band Edge BLE 500k 2402MHz



Band Edge BLE 500k 2480MHz